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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,708	08/01/2000	Hyun Duk Cho	K-197	7522
34610	7590	09/28/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			LEE, Y YOUNG	
			ART UNIT	PAPER NUMBER
			2613	
DATE MAILED: 09/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/630,708	Applicant(s) CHO ET AL.	
	Examiner Y. Lee	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/26/04 has been entered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 13-26, and 30-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagai et al (5,930,395) for the same reasons as set forth in Section 6 of the previous office action dated 8/14/03.

5. Claims 1, 5, 6, 13, 15, and 19-38 are also rejected under 35 U.S.C. 102(b) as being anticipated by Ito (5,068,744).

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Ito, in Figures 3, 4, and 8 discloses a picture data compression apparatus using the same method for encoding and decoding a picture signal as specified in claims 1, 5, 6, 13, 15, and 19-38 of the present invention, comprising the steps of grouping picture information of one block group into respective information regions of each block (e.g. Fig. 3), and partitioning to relevant regions (Fig. 8); and forming a partition table (i.e. DIR) having length information (e.g. Bytes and MAT) of the partitioned regions of the grouped respective information regions (e.g. Packets).

With respect to claims 5, 6, 13, 15, and 19-38, Ito discloses the method of and transmitting resynchronization markers (e.g. ID, Cluster and Packet Numbers, etc.) first for marking the block groups; wherein the partition table is formed by converting a maximum length of each partitioning region (e.g. Address) into a number of bits (e.g. Bytes); wherein the partition table is located at a position in front of the information regions in the picture signal (e.g. Figs. 3, 4, and 8); transmitting the picture signal (Fig. 1); decoding the picture signal based on the length information in the partition table transmitted in the picture signal by determining bit positions and channel decoding 52 each of the information regions in the picture signal based on the length information in the transmitted partition table (Fig. 8).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 2-4, 7-12, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Applicant's admitted prior art.

Although Ito discloses the grouped respective information includes a header region having a group of respective headers of a plurality macro blocks, and a discrete cosine transform coefficient region having a group of respective discrete cosine transform coefficient region of the plurality of macroblocks, it is noted Ito differs from the present invention in that it fails to particularly disclose a motion vector region having a group of respective motion vectors; and subjecting grouped information regions to channel coding in redundancies different from one another depending on importance of the information regions so that the partition table has the highest redundancy.

Applicant's admitted prior art however, on pages 2-5 of the Specification, teaches the concept of such well known redundancy protection technique for the header region, the motion vector region, and the discrete cosine transform region.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Ito and Applicant's admitted prior art before him/her, to exploit the common channel coding technique as taught in applicant's admitted prior art in the encoding method of Ito in order to reliably protecting all of the information regions.

9. Claims 2-4, 7-12, 14, and 16-18 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Nagai et al.

Although Ito discloses the grouped respective information includes a header region having a group of respective headers of a plurality macro blocks, and a discrete cosine transform coefficient region having a group of respective discrete cosine transform coefficient region of the plurality of macroblocks, it is noted Ito differs from the present invention in that it fails to particularly disclose a motion vector region having a group of respective motion vectors; and subjecting grouped information regions to channel coding in redundancies different from one another depending on importance of the information regions so that the partition table has the highest redundancy. Nagai et al however, in Figure 8 for example, teaches the concept of such well known redundancy protection technique for the header region, the motion vector region, and the discrete cosine transform region; and subjecting grouped information regions to channel coding 64 in redundancies different form one another depending on importance of the information regions so that the partition table has the highest redundancy, and the header region, the motion vector region, and the discrete cosine transform region have redundancies in a descending order of recitation (i.e. DCT may be omitted).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Ito and Nagai et al before him/her, to exploit the common channel coding technique as taught in Nagai et al in the encoding method of Ito in order to reliably protecting all of the information regions.

10. Claims 7-12, 27-29, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai et al for the same reasons as set forth in Section 5 of the last office action dated 2/26/04.

Response to Arguments

11. Applicant's arguments filed 7/26/04 have been fully considered but they are not persuasive. All previously presented claims are still directed to the same issues addressed in the last office action. It is submitted that Nagai et al still meets the current claimed invention in its broadest reasonable interpretation.

12. Applicant's arguments with respect to claims 1-38 also have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Heinzelman et al and Yuzawa disclose error protection for compressed video data transmission device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584.

The examiner can normally be reached on (703) 308-7584.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Y. Lee
Primary Examiner
Art Unit 2613

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